

Application No. 10/537,310
Amendment dated October 2, 2007
Reply to Office Action of April 2, 2008

Docket No.: NY-GRYN 223-US

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REMARKS

Claims 12, 13, 18, 21, and 22 have been canceled, and the subject matter recited therein have been substantially incorporated into their respective independent claims 10 and 15. Accordingly, claims 10, 11, 13-17, 19, 20, and new claim 23 are presented for reconsideration.

Claims 10, 11, 15-17 and 20 have been rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent Application Publication No. 2003/0014662 A1 to Gupta et al. (hereinafter "Gupta"). Claims 12-14, 18, 19, 21 and 22 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Gupta in view of U.S. Patent No. 7,237,258 to Pantuso et al. (hereinafter "Pantuso"). Claims 12, 13, 18, 21, and 22 have been canceled, thereby obviating the rejection of these claims. Applicant respectfully traverses these rejections with respect to the remaining claims.

A rejection based on 35 U.S.C. § 102 requires that the cited reference disclose each and every element covered by the claim. *Electro Medical Systems S.A. v. Cooper Life Sciences Inc.*, 32 U.S.P.Q.2d 1017, 1019 (Fed. Cir. 1994); *Lewmar Marine Inc. v. Barient Inc.*, 3 U.S.P.Q.2d 1766, 1767-68 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988); *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2D 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). The Federal Circuit has mandated that 35 U.S.C. § 102 requires no less than "complete anticipation ... [a]nticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 772 F.2d 1542, 1548, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983); See also, *Electro Medical Systems*, 32 U.S.P.Q. 2d at 1019; *Verdegaal Bros.*, 814 F.2d at 631.

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The Examiner has failed to establish that Gupta is an anticipatory reference under 35 U.S.C. § 102 (b) because Gupta does not teach or suggest all of the claimed elements in amended independent claims 10 and 15. Particularly, Gupta does not teach or suggest defining a finite state machine for each application protocol, modeling finite state machines established for each application protocol, generating analysis models from finite state machine models for each application protocol, filtering the transported data using the analysis models established for each application protocol, and selectively restricting the capabilities of one or more application protocol in accordance using the analysis modules, as required in amended claim 10. Similarly, Gupta does not teach or suggest filtering the transported data based on the analysis models established for application protocol and selectively restricting the capabilities of one or more application protocol using the analysis modules, as required in amended independent claim 15.

The present invention relates to a method for securing logical access to information and/or computing resources in a group of computer equipment. The group of computer equipment exchange data with a computer telecommunication network, according to at least one application protocol. As recited in claim 10, the inventive method comprises the following steps: defining a finite-state machine for each application protocol; modelling each finite-state machine established for each application protocol in the form of a model; generating, from each model, an analysis module for each application protocol using an interpreter; filtering the transported data in an operating system using the analysis modules, and selectively restricting the capabilities of one or more application protocol using the analysis modules.

As detailed in paragraphs 72-76 of the specification, the present invention advantageously filters the transported data and then detects and blocks a large number of "application" attacks. In paragraph 4 of the specification, applicant defines an "application" attack as an attack that uses either the vulnerability of an "application"

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protocol; the vulnerabilities linked to the implementation of an "application" protocol by a developer; or the vulnerabilities linked to the use of an application, particularly by a network administrator.

Whereas, Gupta describes methods for detecting intrusions on a computer. Specifically, Gupta describes that the "protocol parser 64 is implemented using a generic state machine." At best, the protocol parser 64 of Gupta is equivalent to the analysis module of the present invention. However, contrary to the Examiner's erroneous assertion, the claims of the present invention do not contain any limitation that the analysis module must be implemented using a finite-state machine.

"To imbue one of ordinary skill in the art with knowledge of the present invention, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim of the insidious effect of hindsight syndrome, wherein that which only the inventor taught is used against the teacher." *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983).

Although Fig. 2 (element 66), Fig. 5 (block 66), and Fig. 9 (block 64); and paragraphs 0086, 0089, and 0091 in Gupta, cited by the Examiner, describes that the protocol parser (arguably equivalent to the analysis module of the present invention) is implemented using a generic state machine, contrary to the Examiner's assertion, Gupta does not teach or suggest "defining a finite-state machine for each application protocol," as required in claim 10. Applicant respectfully submits that the Examiner using hindsight gleaned from the present invention to contradict the clear teaching of the prior art reference to render claims unpatentable. The prior must to be judged based on a full and fair consideration of what that art teaches, not by using applicant's invention as a blueprint for gathering various bits and modifying the pieces in an attempt to reconstruct

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applicant's invention. The Examiner cannot simply change the principle of the operation of the reference to render the claims unpatentable.

Additionally, Fig. 2 (element 67), Fig. 7, Fig. 10, and paragraphs 0107, 0101-1110 in Gupta, cited by the Examiner, merely describes that the protocol parser 64 compares the tokens to its list of tabulated attacks as set forth in Fig. 7 to detect intrusions on the computer, but contrary to the Examiner's assertion, Gupta does not teach or suggest "modeling each finite-state machine in the form of a model," as required in claim 10. Gupta merely describes that the protocol parser 64 (arguably the analysis module) is implemented in using a generic state machine. It is well settled that the Examiner cannot contradict the clear teaching of the reference to render the claims unpatentable.

Further, as noted herein, Fig. 2 (element 67), Fig. 7, Fig. 10, and paragraphs 0107, 0101-110 in Gupta, cited by the Examiner, merely describes that the protocol parser 64 compares the tokens to its list of tabulated attacks as set forth in Fig. 7 to detect intrusions on the computer, but contrary to the Examiner's assertion, Gupta does not teach or suggest "generating from each model, an analysis module for each application protocol using an interpreter," as required in claim 10. Applicant respectfully submits that the Examiner cannot use hindsight gleaned from the present invention to reconstruct or modify the prior art reference to render claims unpatentable.

It is unclear to Applicant, how Gupta can anticipate claim 10 when Gupta fails to teach or suggest three of the four claimed steps. Therefore, since Gupta fails teach or suggest all of the claim limitations of independent claim 10, it follows that Gupta does not anticipate or render obvious independent claim 10, or any of claims 11 and 14 dependent on independent claim 10.

Claims 14 and 19 respectively depend from claims 10 and 15 and additionally requires "parameterizing said analysis modules in accordance with predetermined

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restrictions by a network administrator." However, contrary to the Examiner's assertion, Gupta does not even suggest of parameterizing the analysis modules in accordance with predetermined restrictions by a network administrator, as required in claims 14 and 19. Gupta merely describes comparing the tokens to a list of tabulated attacks as set forth in Fig. 7. The force of logic compels the conclusion that a prior art reference which is silent as to the existence of a claimed element, cannot teach such claimed element. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to render claims 14 and 19 unpatentable.

Moreover, as admitted by the Examiner, Gupta does not teach or suggest selectively restricting the capabilities of one or more application protocol using the analysis modules, as required in amended independent claims 10 and 15. This claimed element was originally recited in now canceled claims 12, 13, 18, 21, and 22. To cure this deficiency, the Examiner turns to Pantuso.

Of course, to establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, and not based on Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. 2143. Here, the Examiner has failed to establish a *prima facie* case of obviousness because Gupta or Pantuso individually or in combination therewith does not teach or suggest all the claim limitations of claims 10, 11, 14-17, 19, 20, and 23.

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Pantuso relates to graphical user interfaces associated with firewalls and summarizing firewall activity. Contrary to the Examiner's assertion, Pantuso does not teach or suggest "selectively restricting the capabilities of one or more application protocols using said analysis modules," as required in amended independent claims 10 and 15. In fact, col. 5, lines 44-54 in Pantuso, cited by the Examiner, merely describes configuring the firewall filtering in a user-defined manner and that the firewall is used to block attempts to access a network made by predetermined applications, such as network browser applications, e-mail applications, and file transfer protocol (FTP) applications. However, claims of the present invention does not require blocking the entire application from accessing the network as called for by Pantuso. The claims of the present invention require limiting the use or capabilities of a particular application to minimize or avoid attacks. That is, the present invention restricts the capabilities of an application, but does not authorize/not authorize an entire application, as suggested by the Examiner.

The prior art must be judged based on a full and fair consideration of what it teaches, not by using Applicants' invention as a blueprint for gathering various bits and modifying the pieces in an attempt to reconstruct Applicants' invention. The Examiner cannot simply change the principle of the operation of the reference or render the reference inoperable for its intended purpose to render the claims unpatentable. Accordingly, it is submitted that the Examiner has succumbed to the lure of prohibited hindsight reconstruction.

Statements appearing above in respect to the disclosures in the cited references represent the present opinions of the applicants' undersigned attorney and, in the event that the Examiner disagrees with any of such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the reference providing the basis for a contrary view.

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In view of the above, applicant believes the pending application is in condition for allowance.

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Please charge \$525.00 to the credit card. Form PTO-2038 is attached. The Commissioner is hereby authorized to charge any additional fee or credit any overpayment to Deposit Account No. 50-0624, under Order No. NY-GRYN 223-US (10505903) from which the undersigned is authorized to draw.

Dated: April 2, 2008

Respectfully submitted,

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